WISCONSIN EPI EXPRESS
May 1, 2003

Wisconsin Department of Health & Family Services
Division of Public Health
Bureau of Communicable Diseases

"Surveillance provides information for action." World Health Organization

The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. **Herb Bostrom: *bostrhh@dhfs.state.wi.us***

In This Issue:

1. HIPAA Privacy Rule and Public Health

The Health Insurance Portability and Accountability Act (HIPAA) provides protection for the privacy of patient health information, while balancing the need for public health agencies to perform disease and injury control and prevention activities. The administrative simplification provision regarding public health states:

> "Nothing in this part shall be construed to invalidate or limit the authority, power, or procedures established under any law providing for the reporting of disease or injury, child abuse, birth or death, public health surveillance, or public health investigation or intervention."

This provision ensures that communications between covered health care entities and public health agencies will not be hindered by any portion of the privacy regulations. Reporting of communicable diseases under Ch. 252 Wis stats (Communicable Diseases) and Wisconsin Administrative Rule HFS 145 (Control of Communicable Diseases), and other exchanges of information necessary to provide for public health and safety, can and must continue to occur.

Although public health agencies are not covered entities under the federal HIPAA privacy rules, the Bureau of Communicable diseases is committed to the long-standing ethic and practice in public health agencies of maintaining the privacy

2. Incidence and Fatality from Meningococcal Disease, Wisconsin, 1993-2002

Neisseria meningitidis, commonly known as meningococcus, is the leading cause of bacterial meningitis in many parts of the world and a major cause of sepsis in children and young adults in the United States. Since the 1960's, meningococcal disease rates in the US have remained relatively stable with an average annual incidence of 0.9-1.5 cases per 100,000 persons. To describe the recent epidemiology of meningococcal disease in Wisconsin, we evaluated meningococcal surveillance data collected in Wisconsin between 1993 and 2002.

A total of 462 cases of meningococcal disease were reported in Wisconsin from January 1, 1993 and December 31, 2002 (average of 46 cases per year). Overall incidence of reported meningococcal disease in Wisconsin was 0.9 cases per 100,000 persons per year between 1993

and 2002. A seasonal trend was observed, with higher numbers of cases reported between January and April and in September and October [Figure 1]. Among the 305 cases serogrouped, B, C, and Y serotypes represented an approximately equal proportion of cases over the ten-year period (32%, 31%, and 33% respectively).

Mean age of cases was 27.9 years (range = 19 days to 98 years) and age-specific incidence was highest among children aged less than 2 years (6.01 cases per 100,000 persons per year) [Figure 2]. Since 1996, when data collection on college student status was initiated, 30 cases were reported among college students, representing 9% of Wisconsin cases between 1996 and 2002. Eighteen (60%) of the 30 college student cases occurred during 2001 or 2002 (7 and 11 respectively).

Among the 416 cases whose fatality status was reported, 48 died from their illness (12% case fatality ratio) for an average of approximately 5 fatalities per year. There was no observed change in the annual case fatality ratio over the 10-year period (p=0.50). The annual mortality rate due to meningococcal disease in Wisconsin over the 10-year period between 1993-2002 was 0.09 per 100,000 persons per year. Children aged <2 years had at least a 5-fold higher mortality rate compared with all other age groups (0.77 deaths due to meningococcal disease per 100,000 persons per year). Six (13%) of the 48 fatalities occurred among college students. Among fatalities where serotyping was performed, the highest case fatality ratio was associated with serogroup C (20%), followed by serogroup B (7%) and serogroup Y (5%).

Figure 1. Month-by-Month Breakdown of Meningococcal Cases, Wisconsin, 1993-2002

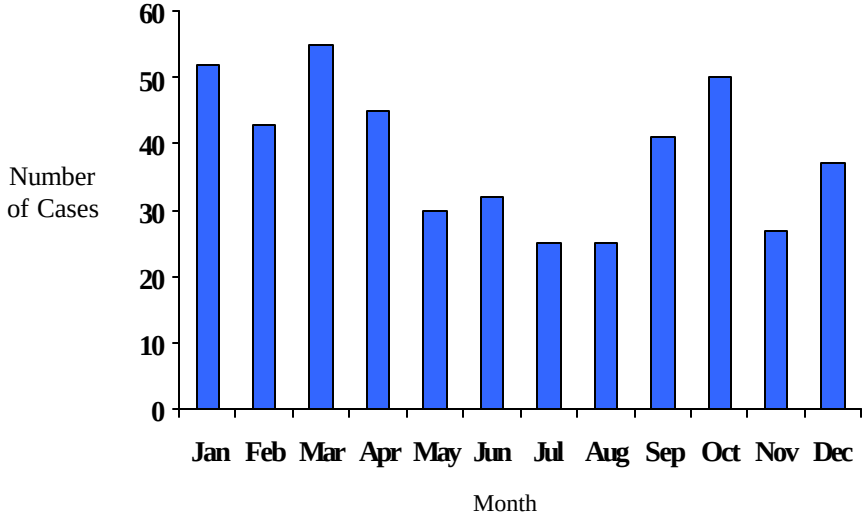
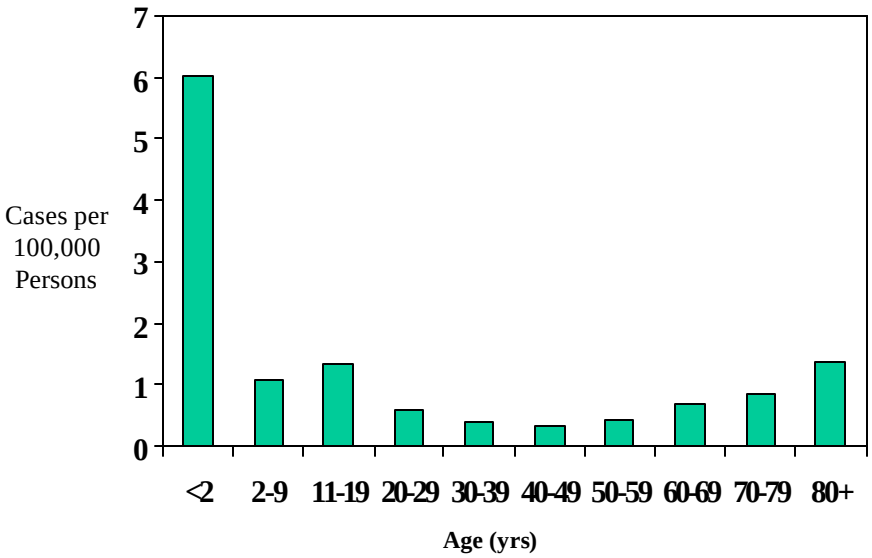


Figure 2. Age-Specific Incidence of Meningococcal Disease, Wisconsin, 1993-2002



3. Shiga Toxin-Producing *E. coli* non- 0157:H7 (STEC)

As the barbecue season approaches, the Communicable Disease Epidemiology Section would like to remind everyone of Wisconsin's enhanced surveillance program for all Shiga toxin-producing *E. coli* (STEC).

On April 1, 2000, in addition to *E. coli* O157:H7, all cases of Shiga toxin-producing *E. coli* (STEC) became reportable in Wisconsin under State Statute 252.05 and Administrative Rule Chapter HFS-145. STEC may cause illness ranging from mild diarrhea to more severe infections such as hemorrhagic colitis and hemolytic uremic syndrome (HUS). Studies have shown STEC organisms have been isolated from large foodborne outbreaks and sporadic cases throughout United States. Only a handful of STEC cases have been reported in Wisconsin since December 2002.

Recently, the Centers for Disease Control and Prevention (CDC) have placed renewed emphasis on programs to enhance surveillance and reporting of STEC infections throughout the United States. Under this new surveillance program, the Wisconsin Division of Public Health (WDPH) and the Wisconsin State Laboratory (WSLH) will provide fee exempt services to participating laboratories. Stool specimens can be submitted to the WSLH for initial screening and confirmation of pathogenic STEC organisms. The initial screening for STEC will be performed using a commercial Enzyme ImmunoAssay (EIA) kit. Any STECs shown to produce toxins on initial screen will be confirmed using Polymerase Chain Reaction (PCR) to target specific toxin-producing genes.

Specimens that are submitted for STEC testing must meet the following criteria:

1. Diarrhea stool specimens that are negative after being screened for routine enteric pathogens (*Salmonella, Shigella, E. coli 0175:H7, and Campylobacter*).
2. Stool specimens with a history of bloody diarrhea (especially from children).
3. Specimens from patients diagnosed with hemolytic uremic syndrome (HUS).

If you have any questions regarding the STEC Surveillance Program, please contact Diep (Zip) Hoang Johnson, STEC Surveillance Coordinator at (608) 267-7422. For questions regarding specific information on collection of specimens and kits required for STEC analysis please contact the WSLH at (608) 262-1616.

Telephone Reporting of Unusual Disease Occurrences

Occurrences of diseases that are uncommon or atypical in Wisconsin, and outbreaks or clusters of disease which are identified, should be reported by phone as soon as possible, to (608) 258-0099. Reports may be made to this number on a 24/7 basis, but please do not use it for normal and routine disease reporting

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